

**WHAT IS CLAIMED IS:**

1. A method for the treatment of cancer in a mammal having said condition, which method comprises administering to said mammal an amount of a serotonin agent effective to treat the cancer.
2. The method of claim 1, wherein the serotonin agent inhibits tumor growth.
3. The method of claim 1, wherein the serotonin agent inhibits metastasis.
4. The method of claim 1, wherein the cancer is melanoma.
5. The method of claim 1, further comprising administering another chemotherapeutic agent to said mammal.
6. The method of claim 1, further comprising administering a biological therapy agent to said mammal.
7. The method of claim 1, further comprising administering radiotherapy to said mammal.
8. The method of claim 1, wherein the serotonin agent is administered orally, subcutaneously, topically, or intravenously.
9. The method of claim 1, wherein the serotonin agent is a serotonin reuptake inhibitor.
10. The method of claim 1, wherein the serotonin agent is a selective serotonin reuptake inhibitor (SSRI).

11. The method of claim 1 wherein the serotonin agent is selected from fluoxetine, fluvoxamine, paroxetine, sertraline, and citalopram, and pharmaceutically acceptable salts thereof.
12. The method of claim 11 wherein the serotonin agent is fluoxetine or a pharmaceutically acceptable salt thereof.
13. The method of claim 1 wherein the mammal is a human.
14. A method of inhibiting the growth of a cancer cell comprising contacting the cancer cell with an effective amount of a serotonin agent.
15. The method of claim 14 wherein the cancer cell is a melanoma cell.
16. The method of claim 14 wherein the serotonin agent is a selective serotonin reuptake inhibitor (SSRI).
17. The method of claim 14 wherein the serotonin agent is selected from fluoxetine, fluvoxamine, paroxetine, sertraline, citalopram, and pharmaceutically acceptable salts thereof.
18. The method of claim 17 wherein the serotonin agent is fluoxetine or a pharmaceutically acceptable salt thereof.
19. The method of claim 15 wherein the melanoma cell is a pigmented cell.
20. The method of claim 15 wherein the melanoma cell is a non-pigmented cell.

21. A method for the treatment of cachexia in a mammal, which method comprises administering to said mammal an effective amount of a serotonin agent to treat cachexia.
22. The method of claim 21 wherein the mammal has cancer.
23. The method of claim 22 wherein the cancer is melanoma.
24. The method of claim 21 wherein the serotonin agent is a selective serotonin reuptake inhibitor (SSRI).
25. The method of claim 21 wherein the serotonin agent is selected from fluoxetine, fluvoxamine, paroxetine, sertraline, citalopram, and pharmaceutically acceptable salts thereof.
26. The method of claim 25, wherein the serotonin agent is fluoxetine or a pharmaceutically acceptable salt thereof.
27. The method of claim 21, wherein the amount of serotonin agent is effective to inhibit weight loss in the mammal.
28. The method of claim 21 wherein the amount of serotonin agent is effective to inhibit wasting in the mammal.
29. The method of claim 27 or 28 wherein the amount of serotonin agent is effective to inhibit the loss of body fat.
30. The method of claim 27 or 28 wherein the amount of serotonin agent is effective to inhibit the loss of body mass.